

IN THE CLAIMS

1. (Currently Amended) A method comprising:
receiving data segments of at least one class of service at each of a plurality of ingress line cards, each class of service having an associated guaranteed percentage of transmission bandwidth;

marking a portion of the data segments of each class of service based on the associated guaranteed percentage of the transmission bandwidth of the class of service, such that if data transmitted from a class of service exceeds the associated guaranteed percentage of the transmission bandwidth of the class of service, then the number of data segments marked corresponds to the associated guaranteed percentage of the transmission bandwidth of the class of service, and if data transmitted from a class of service is less than the associated guaranteed percentage of the transmission bandwidth, then all the data segments of the class of service are marked; and

preferentially transmitting the marked data segments from each class of service.

2. (Original) The method of claim 1, further comprising:
transmitting unmarked data segments from each class of service equally.

3. (Original) The method of claim 1, wherein the data segments are asynchronous transfer mode cells.

4. (Previously Presented) The method of claim 1, wherein the data segments are data types selected from a group consisting of frame relay packet, voice transmission data, internet protocol packet, or circuit emulation service packet.

5. (Previously Presented) The method of claim 3, wherein marking includes implementing a must-serve bit on the cells.

6. (Original) The method of claim 2, wherein preferentially transmitting the marked data segments includes guaranteeing the marked data segments are transmitted prior to transmitting the unmarked segments.

7. (Previously Presented) An apparatus comprising:

means for receiving data segments of at least one class of service at each of a plurality of ingress line cards, each class of service having a guaranteed percentage of transmission bandwidth;

means for marking a portion of the data segments of each class of service based on the guaranteed percentage of bandwidth of the class of service, such that if data transmitted from a class of service exceeds the guaranteed percentage of transmission bandwidth of the class of service, then the number of data segments marked corresponds to the guaranteed percentage of transmission bandwidth of the class of service, and if data transmitted from a class of service is less than the guaranteed percentage of transmission bandwidth of the class of service, then all the data segments of the class are marked; and

means for preferentially transmitting the marked data segments from each class of service.

8. (Original) The apparatus of claim 7, further comprising:

means for transmitting unmarked data segments from each class of service equally.

9. (Original) The apparatus of claim 7, wherein the data segments are asynchronous transfer mode cells.

10. (Previously Presented) The apparatus of claim 7, wherein the data segments are data types selected from a group consisting of frame relay packet, voice transmission data, internet protocol packet, or circuit emulation service packet.

11. (Previously Presented) The apparatus of claim 9, wherein marking includes implementing a must-serve bit on the cells.

12. (Original) The apparatus of claim 9, wherein preferentially transmitting the marked data segments includes guaranteeing the marked data segments are transmitted prior to transmitting the unmarked segments.

13. (Previously Presented) A machine-readable medium that provides executable instructions, which when executed by a processor, cause said processor to perform a method, the method comprising:

receiving data segments of at least one class of service at each of a plurality of ingress line cards, each class of service having a guaranteed percentage of transmission bandwidth;

marking a portion of the data segments of each class of service based on the guaranteed percentage of bandwidth of the class of service, such that if data transmitted from a class of service exceeds the guaranteed percentage of transmission bandwidth of the class of service, then the number of data segments marked corresponds to the guaranteed percentage of transmission bandwidth of the class of service, and if data transmitted from a class of service is less than the guaranteed percentage of transmission bandwidth of the class of service, then all the data segments of the class are marked; and

preferentially transmitting the marked data segments from each class of service.

14. (Original) The machine-readable medium of claim 13, wherein the method further comprises:

transmitting unmarked data segments from each class of service equally.

15. (Original) The machine-readable medium of claim 13, wherein the data segments are asynchronous transfer mode cells.

16. (Previously Presented) The machine-readable medium of claim 13, wherein the data segments are data types selected from a group consisting of frame relay packet, voice transmission data, internet protocol packet, or circuit emulation service packet.

17. (Previously Presented) The machine-readable medium of claim 15, wherein marking includes implementing a must-serve bit on the cells.

18. (Original) The machine-readable medium of claim 14, wherein preferentially transmitting the marked data segments includes guaranteeing the marked data segments are transmitted prior to transmitting the unmarked segments.

19. (Previously Presented) An apparatus comprising:
- a receiving device to receive data segments of at least one class of service at each of a plurality of ingress line cards, each class of service having a guaranteed percentage of transmission bandwidth;
 - a marking device to mark a portion of the data segments of each class of service based on the guaranteed percentage of bandwidth of the class of service, such that if data transmitted from a class of service exceeds the guaranteed percentage of transmission bandwidth of the class of service, then the number of data segments marked corresponds to the guaranteed percentage of transmission bandwidth of the class of service, and if data transmitted from a class of service is less than the guaranteed percentage of transmission bandwidth of the class of service, then all the data segments of the class are marked; and
 - a transmitting device to preferentially transmit the marked data segments from each class of service.
20. (Original) The apparatus of claim 19, wherein the transmitting device is capable of transmitting unmarked data segments from each class of service equally.
21. (Original) The apparatus of claim 19, wherein the data segments are asynchronous transfer mode cells.
22. (Previously Presented) The apparatus of claim 19, wherein the data segments are data types selected from a group consisting of frame relay packet, voice transmission data, internet protocol packet, or circuit emulation service packet.
23. (Previously Presented) The apparatus of claim 21, wherein marking includes implementing a must-serve bit on the cells.
24. (Original) The apparatus of claim 21, wherein preferentially transmitting the marked data segments includes guaranteeing the marked data segments are transmitted prior to transmitting the unmarked segments.